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ABSTRACT

This study investigated the return on investment (ROI) of the Southern extension Leadership Development (SELD) Program as implemented at the University of Georgia. The SELD program builds around the skills individuals and groups in cooperative extension work need to be effective in the future. The centerpiece of SELD is the Managerial Assessment of Proficiency (MAP), the assessment portion of which is a video-driven, competency-based, computer-scored simulation of 200 items that assesses the participant's proficiency in 12 competencies. Two basic calculations are required to compute ROI: the benefit/cost ratio and the second ROI. Calculating ROI is not easily done, but with the access to personnel records possible in this evaluation, the analysis was made somewhat easier. Data were available for 185 Cooperative Extension Agents. Findings suggest that for every $1 invested, $3.86 in benefits were returned, and for each $1 invested in the program, there is a return of $2.86 in net benefits. Good record keeping makes the calculation of ROI much easier. (SLD)

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LEADERSHIP DEVELOPMENT: RETURN ON INVESTMENT

Calculating the Monetary Value of The Managerial Assessment Of Proficiency Program for The Georgia Extension System

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INTRODUCTION

Measuring the Return On Investment (ROI) in training and development has consistently earned a place among the critical issues in the Human Resources Development (HRD) field. The topic appears routinely on conference agendas and at professional meetings. Journals and newsletters regularly embrace the concept with increasing print space. At least a dozen books provide significant coverage of the topic. Even top executives have developed an appetite for ROI information (Phillips, 1997). Leadership educators may soon find that program sponsors and administrators will be asking for Return On Investment information as well.

Although the interest in the topic has heightened and much progress has been made, it is still an issue that challenges even thè most sophisticated and progressive HRD departments and those involved with leadership development programs. Some professionals argue that it is not possible to calculate the ROI of many programs, while others develop measures and ROI calculations. Regardless of the position taken on the issue, the reasons for measuring the return are still there(Phillips, 1977). Most professionals involved in training and development share a concern that they must eventually show a return on their training investment and thereby abandon some of the more traditional methods of evaluating programs.

The term evaluation has been used by leadership educators and human resource professionals in a variety of ways. Most professionals would agree that the term evaluation implies a 'change in something' or connotes the value or worth of a program or training. How one measures the 'change', 'value or worth' varies greatly, however, most evaluations seem to fall into one of four categories. A survey conducted by Training in 1996 surveyed over 40,000 training managers and specialists to determine the status of how training was evaluated. Table 1 shows the results.

Table 1: Evaluation of Training in Industry

Level	As a Percent of Organizations Measuring at this Level	Percent of Courses Measured at this Level
Level 1: Training Reaction	86%	83%
Level 2: Learning	71%	51%
Level 3: Behavior	65%	50%
Level 4: Business Results	49%	44%

Source: Training *magazine*, October 1996, p. 63.

As indicated in table 1, most evaluations were conducted at the lower levels -measuring a participants reaction to a program (level 1), or measuring skills, knowledge or attitude changes (level 2). Measuring behavioral changes (level 3) and the business impact of the program (level 4) were the two remaining levels of evaluation. The report indicates that surprisingly, these last two levels (3 and 4) accounted for 65% and 49% respectively of the evaluations organizations conducted. Phillips(1997) states that "there is a distinct trend toward more accountability of training, particularly at the higher levels of evaluation where training is connected to business results". As a result of this trend Phillips(1997) states that "a fifth level of evaluation has become more prominent–Return on Investment or ROI." This level of evaluation compares the monetary value of the results with the cost for the program and is usually expressed as a percentage figure.

Evaluation of leadership programs have largely been limited to the lower levels of evaluation. The W.K. Kellogg Foundation (2002) reviewed 55 major leadership development programs with the hope that it would shed some light on how various programs are evaluating outcomes and impacts. Their key findings indicate that most programs measured individual leadership outcomes in the traditional ways–participant reactions, changes in knowledge, skills, attitudes, behaviors, relationships built, etc. Few dealt with the monetary value of the program–comparing results with cost or ROI. At best, some programs reported leveraged dollars or money that individuals, collaborations of program participants, organizations or communities have been able to attracted as a result of the program. The implication with such a measure is that these dollars, being attracted as a result of the program implies an improved leadership capacity.

Regardless of the setting, ROI is now taking on increased interest (Phillips, 1997). Executives and program directors who watched their training budgets grow without appropriate accountability measures are now demanding a return on training investment. Leadership educators are not exempt from this dilemma. Most are being asked to report impacts, more will be asked to report return on investment.

This paper reports the return on investment of the Southern Extension Leadership Development (SELD) program as implemented at The University of Georgia. A brief explanation of that program is provided below followed by the calculations used to determine the ROI on the Georgia SELD program.

SELD: Southern Extension Leadership Development

During the past decade, the Cooperative Extension System has faced an era of economic scarcity and has been impacted by a number of internal and external challenges (Ladewig & Rohs, 2000). Many of these changes and challenges have changed the nature of work and relationships. Organizations that respond to the changing nature of work and authority relationships are learning organizations (Senge, 1990).

A major challenge impacting the transition to a learning organization is that few Extension administrators are professionally trained in competencies and styles of leadership appropriate for

learning organizations. Rather, they have been promoted to leadership positions because they excelled in their subject-matter discipline, and they learn their new craft by emulating those who proceeded them. While this practice is commonplace throughout the industrialized world, these administrators often lack the necessary leadership competencies necessary to truly transform their organizations to compete in the information technology era (Patterson, 1998).

In response to the growing need to understand and cope with the many changes currently and potentially impacting the Extension System, Cooperative Extension Directors and Administrators of the Southern Region called for the establishment of a regional leadership development program. The results was the formation of Southern Extension Leadership Development (SELD).

The SELD program is unique in that the competency-based approach builds around the skills individuals and groups in Cooperative Extension need to be effective in the future. With such knowledge, Extension educators can design professional development plans that are relevant, useful, and customized to their needs. While regional workshops were conducted individual states were encouraged to implement their own leadership development program. The centerpiece of SELD is the Managerial Assessment of Proficiency (MAP), developed by Training House, Inc. of Princeton, NJ. The assessment portion is a video-driven, competency-based, computer-scored simulation consisting of 200 items that assesses a participant's proficiency in 12 competencies. The twelve competencies are: Time management, setting goals, planning and scheduling work, training, coaching and delegating, appraising people and performance, disciplining and counseling, listening and organizing, giving clear information, getting unbiased information, solving problems, making decisions and weighing risk, thinking clearly and analytically. The assessment portion was followed by a series of competency building workshops to strengthen participants weaker competency areas.

PROGRAM COSTS AND BENEFITS

Before calculating the Return On Investment program costs and benefits must be determined. Tabulating the costs involves monitoring or developing all related costs of the program targeted for the ROI calculation. Among the cost components that should be included are:

* cost of the design of the program, prorated if possible over the expected life of the program;
* cost of all program materials provided to participants;
* instructor costs, including preparation time and delivery time;
* costs of facilities for the program;
* travel, lodging and meal costs for participants, if applicable;
* salaries, plus employee benefits of the participants who attend the program;
* administrative and overhead costs of the training function.

Phillips(1997) states that specific costs related to the needs assessment and evaluation should be

included, if appropriate. Phillips(1997) recommends the conservative approach, including all of these costs so that the total is fully loaded.

Program benefits, especially for leadership educators , may be harder to measure. Converting leadership impact data into monetary values, in most instances is difficult–but not impossible. For example, a team building program in a manufacturing plant reduced the number of monthly grievances filed by employees. Six months after the program was completed the reduction in grievances per month (related to the program as determined by supervisors) declined by seven. Using the labor relations staff in the company, the cost of the average grievance was estimated to be $6,500 when considering time and direct costs. At seven grievances per month the total annual value of the program would be $546,000 (84 x $6,500= $ 546,000).

When converting data to monetary benefits one must first focus on a unit of improvement or measurement. In the above case that unit was the number of grievances per month. Then a value was assigned to each unit or grievance. In the above case the value or cost of one grievance was estimated by those most familiar with the process, i.e. the labor relations staff. Once these figures are determined, the value of the program or improvement can be calculated.

Calculating the Return on Investment (ROI)

Two basic calculations are required to compute the Return On Investment. The first is the Benefit/Cost Ratio (BCR) and the second Return on Investment (ROI). Those formulas and an example follow.

$$BCR = \frac{\text{Program Benefits}}{\text{Program Cost}}$$

$$ROI\ (\%) = \frac{\text{Net program Benefits}}{\text{Program Costs}} \times 100$$

The BCR utilizes the total benefits and costs. In the ROI formula, the costs are subtracted from the total benefits to produce net benefits which are divided by the costs. For example, a program at Peach State, Inc. produced benefits of $283,500 with a cost of $40,500. Therefore, the benefit/cost ratio is:

$$BCR = \frac{\$283,500}{\$40,500} = 7.0 \text{ (or } 7.0{:}1)$$

As this calculation shows, for every $1 invested, $7 in benefits are returned. In this example, net benefits are $283,500 - $40,500 = $243,000. Thus, the ROI is :

$$ROI(\%) = \frac{\$243,000}{\$\ 40,500} \times 100 = 600\%$$

This means that for each $1 invested in the program, there is a return of $6 in net benefits. The

benefits are usually expressed as annual benefits, representing the amount saved or gained for a complete year after program completion. While the benefits may continue after the first year if the program has long-term effects, the impact usually diminishes and is omitted from calculations.

ROI: A LEADERSHIP EXAMPLE

New Extension Agents hired between 1995 and 2001 who completed their probationary period of 18 months with the cooperative extension service formed the population for this study. Based on Extension Personnel records a total of 216 new county extension agents (CEA's) were hired and participated in the same new employee orientation program. Only 185 CEA's completed their probationary period during this time and were included in this study. Basic background data was also gathered on these employees. This data included gender, degree level (BS, MS), ethnic background and job responsibility (AG, FACS, 4-H) and if resigned or terminated. Based on personnel records these new CEA's were then grouped into one of two groups. The first group were those individuals who completed the Georgia SELD/MAP and follow up Excel skill building program workshops and the second group–those who did not participate in the SELD/MAP and follow up program. It was found that 40 CEA's completed the Georgia SELD/MAP program and 145 did not. Furthermore only two CEA's in the SELD/MAP group had left the organization and 38 of the CEA's in the non-SELD/MAP group had left the organization during this time period. These figures represent an employee turnover rate of 5% and 26% respectively. It was this difference in turnover rates (26% vs. 5%) that provided the basis for calculating the program benefits in monetary terms.

Program Benefits

Based on these figures the potential turnover rate among the SELD/MAP participants could have been as high as 26% or 10 CEA's leaving instead of the actual 2 CEA's at the 5% turnover rate. Thus 8 (10-2=8) fewer CEA's left the organization benefiting the Georgia Extension organization in the amount of $400,000 ($50,000 x 8 = $400,000).

Program Costs

To calculate the ROI on the Georgia SELD/MAP program the following program cost components were used:

* Program Design Costs- license fee, costs for video tapes, etc. per individual @ $10.00. Total costs= $400.00

* Program Material Costs to Participants- @ $60.00 per participant for MAP and $100.00 per participant for follow up Excel workshop. Participants=40. Total Costs= $2400.00 + $4,000.00 = $6,400.00

* Instructor Costs- prorated salary time @ $500.00 per day (includes all fringe benefits and costs to the organization/university). Two instructors –12 days per year for 6 years. Total Costs= $36,000.

* Facilities Costs- State 4-H Center charge for use of facilities/equipment @ $8.00 per participant for follow up Excel workshop. ($8.00 x 40= $320.00)
Total Costs = $320.00

* Travel Costs- 28 cents / mile for auto, $28.00 per day for meals and $55.00 per night for lodging if necessary (includes instructor and participant travel costs). Amounts based on attendance and travel records.
Total Costs= $10,460.00

* Salaries plus employee benefits for participants- based @ $50,000 per year- prorated For number of days in the program (6 days). The $50,000 figure was arrived at based on administrative communications and college business office calculations. Cost computation- $200.00/ day x 6 days= $1200/ participant. $1200.00 x 40 participants= $48,000.00

* Administrative and Overhead Costs- @ 2% of total cost = $2,031.00
(Accounting figure used by college business office)

TOTAL PROGRAM COSTS = $103,611.00

Using the formulas for BCR (Benefits/cost Ratio) and ROI (Return on Investment) the following calculations were made:

TOTAL BENEFITS-$400,000
TOTAL PROGRAM COSTS -$103,611

BCR- $400,000 / $103,611 = 3.86

ROI- ($400,000-$103,611) / $103,611 x 100 = 286 %

Thus the benefit cost ratio (BCR) calculation shows that for every $1 invested , $3.86 in benefits are returned and that for each $1 invested in the program, there is a return of $2.86 in **net** benefits.

DISCUSSION AND SUMMARY

Calculating the Return On Investment of a leadership program is not easily done. Many programs are not able to convert outcome measures to monetary terms. In this particular case one measure could be used–employee turnover. Identifying a unit of measurement that can be converted to a monetary value will present a challenge to those involved in leadership training. While business and industry can provide some examples that may help with identifying outcome measures easily

converted to monetary value many leadership programs are conducted in settings less conducive to assigning monetary values to outcomes with any degree of validity. Fortunately in this study personnel records and travel data were either easily accessible or readily computed with relative ease.

The access to personnel records, while not complete, allowed for some additional data analysis. Specifically, were the two groups of extension agents (MAP/SELD participants vs non-participants) significantly different from each other on some variable that might influence the results? To answer this question some basic background data was available from their files. The data that was analyzed included major job responsibility (agriculture, family/consumer science or 4-H youth), gender, ethnicity, degree level (BS, MS) and whether or not they were still employed by the Georgia Extension Service. The only statistically significant difference ($p < .01$) found between the two groups was that those who did not participate in the MAP/SELD program were more likely to leave the organization than those who did (Table 2.).

Table 2: Test of significance between groups on selected variables

Variable	Variable Mean		t-value
	Map/Seld N=40	No Map/Seld N=145	
Job Responsibility (2 = Agr, 3 = FACS, 4 = 4-H Youth)	3.10	3.20	-0.37
Gender (1 = male, 2 = female)	1.60	1.60	1.00
Ethnicity (1 = Caucasian, 2 = African American, 3 = other)	1.12	1.05	1.34
Degree Level (1 = BS, 2 = MS)	1.49	1.50	0.96
Resign/Terminate (1 = yes, 2 = no)	1.93	1.73	-2.65*

*$p < .01$

This study indicates that for every $1.00 spent in the MAP/EXCEL program $3.86 in benefits are realized and $2.86 in net benefits are returned on the investment. Had all those extension agents hired between 1995 and 2001 participated in the program, employee turnover might have been reduced by 21% , saving the organization a minimum of $1,550,000.00 (31 fewer terminations x $50,000= $1,550,000) in annual employee turnover costs. Since these terminations occurred after an average of 2.33 years of employment the total savings to the Georgia Cooperative Extension Service could have exceeded $3.62 million ($1,550,000 x 2.33 years).

While this study does not account for all the variables that may influence whether a person continues with the organization or not, one of the key factors can be the type of management and leadership training they receive. In some instances a monetary value can be calculated to show the benefits of such a program. With good record keeping program costs can also be determined. With benefit and costs figures the return on investment (ROI) on a program can be easily computed.

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